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Re application:

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Examiner: Nicholas D. Rosen

FOR: METHOD, APPARATUS AND PROCESSES FOR REAL-TIME  
INTERACTIVE ONLINE ORDERING AND RE-ORDERING AND  
OVER THE COUNTER PURCHASING WITH REBATE, SAVING,  
AND INVESTING PROCESSES

BACKGROUND OF THE INVENTION

a) Field Of Invention:

I hereby claim the priority benefit of provisional applications  
60/090,698, filed June 24, 1998, and 60/3033,532, filed May 10,  
1999.

The present invention relates to a system, methods and processes  
for purchasing, volume purchasing or excess inventory purchasing  
or excess capacity purchasing for a plurality of purchasers who are  
in fact group purchasing yet purchasing individually from  
merchants for goods, products or services and who obtain rebates  
which are invested while real-time interactive online direct  
ordering and automatic re-ordering of said goods or services by

way of real-time interactive online showrooms (CyberShowRooms) and showcases (CyberShowCases) and directly communicating with the servicing salesperson (CyberSalesPersons). The present invention also encompasses means for interfacing with wholesaler warehousing and distribution systems. The purpose for the present invention is to bring forth a means for an extremely unique purchasing experience whereby individual consumers and individual merchants can purchase all types of goods and services and take advantage of the savings brought about by volume purchasing of these goods, products and services. It is further envisioned that the savings realized by volume purchasing will be placed in consumer's retirement investing accounts thereby giving the consumer added funds for retirement and other purposes. The present invention solves these problems.

### Rebates, Saving and Investing:

The Need For Action. American workers generally need three elements to ensure financial security in retirement: (1) Social Security; (2) an employer-provided pension plan; and (3) personal retirement savings. Currently, Social Security is the sole source of income for 18 percent of all elderly Americans, and the primary source for two-thirds of all senior citizens. For over five years, the President has worked with Congress to expand pension coverage, make pensions more secure, and simplify pension plan administration. Despite these achievements, the personal savings rate among Americans remains too low, and many workers do not

have pension coverage through their employers. Research shows that:

More than 50 million employees – half of All-American workers, are not covered by a pension plan;

Only 305 percent of private sector workers under age 25 are covered by a pension plan;

Only 21 percent of private sector workers earning under \$305,000 a year are covered by a pension plan;

Only 24 percent of full-time workers in firms with fewer than 100 employees are covered by a pension plan

#### b) Description Of The Related Art

I could find no prior art relating to purchasing, volume purchasing or excess inventory purchasing or excess capacity purchasing for a plurality of purchasers who are in fact group purchasing yet purchasing individually from merchants for goods, products or services and who obtain rebates which are invested while real-time interactive online direct ordering and automatic re-ordering of said goods or services by way of real-time interactive online showrooms (CyberShowRooms) and showcases (CyberShowCases) and directly communicating with the servicing salesperson (CyberSalesPersons)

## BRIEF SUMMARY OF THE INVENTION

The Invention encompasses technology that will greatly facilitate the sale of goods and services while providing customers with a means to painlessly fund their Individual Retirement Accounts. While doing so, the present invention provides a novel volume purchasing and rebate system having a volume purchasing rebate that addresses a purchaser's long term need to provide for his retirement security. In accordance with the principles of the present invention, a volume purchasing and rebate system is disclosed in which a monetary volume purchasing rebate for volume purchasing or purchasing of excess inventory and capacity is transferred to the purchaser's retirement account. The volume purchasing and rebate system of the present invention thereby provides the purchaser with volume purchasing rebate for volume purchasing goods and services and purchasing excess inventory and capacity that addresses the purchaser's long-term need of providing for his retirement security.

It is another primary object of the present invention to provide technology that will greatly facilitate the volume purchase and sale of goods and services and to provide a means for real-time interactive online ordering and the re-ordering of said goods and services while also providing customers with a means to painlessly fund their Individual Retirement Accounts.

The present invention also provides a method for purchasing goods, products or services and obtain and invest rebates using a plurality of purchasers who have an option of volume purchasing and obtaining rebates and/or purchasing excess inventory and

obtaining rebates. This option derives from many factors to include, consultation with the Certified Purchasing Planner (CPP), or as a result of a decision based upon researching volume purchasing and excess inventory or capacity purchasing opportunities and options with the ordering or control monitoring unit and the purchasing facilitation systems unit (VPRI module assembly) of the present invention. Volume purchasing or excess inventory or capacity purchasing opportunities and options can also be downloaded to the purchaser based upon the purchasers past purchasing trends and desires. The reordering reader or the opening station can be used for reordering of goods, products or services. Purchasers will use various purchasing cards to include VPRI credit cards, VPRI debit cards, VPRI smart cards or any other type card suitable for present invention purchasing. Input devices such as card reader, and terminal, interfacing with the VPRI module assembly, which can allow said VPRI credit cards, VPRI debit cards, VPRI smart cards or any other type card pay for the selected goods, products or service and facilitate rebates for the purchasers investment account.

Another segment of the present invention brings forth a means to interfaces with the VPRI module assembly and relates generally to a closed-circuit television purchasing systems using either cameras in a fixed location or cameras that are mounted for movement along a track, dome or stand to provide automatic acquisition of a product object in response to an command signal or the like.

The present invention also includes methods of simulating the motion of real-time shopping through the use of pan, tilt and zoom cameras, which enhance product presentation through motion etc. In the case of an operator-attended purchasing system, the human operator may attempt to respond to the command signal by operating system controls to reposition the camera carriage and to adjust the camera direction, etc. so that an image of the product is obtained.

The present invention also includes means and methods whereby shoppers/buyers virtually shop at regional as well as international establishments without leaving the comfort of their homes and businesses. However, purchased products are pre-positioned at strategic locations to speed up delivery to the purchaser etc.

This segment of the present invention also interfaces with the VPRI module assembly and relates to a new and improved merchant's CyberShowCase which has for its principal purpose to provide a moving and adjustable CCTV system for motorized revolving platform and hanger systems on which the product to be pictured rests and also for a multi-colored backdrop system which is positioned behind the product in the line of sight of the camera. The multi-colored backdrop is preferably illuminated from behind with rear view projection or from the front with either a white light or a light having appropriate color filter. The projectioned or multi-

colored backdrop provides a wide variety of scenes as background for the product being photographed.

This apparatus also encompasses means and methods of giving the presented product motion through the use of pan-tilt-zoom cameras and moving platforms and racks located in the CyberShowCase. Not only do these devices provide motion, but they also present multiple viewing angles to make product presentation more appealing.

The CyberShowCase may be used either as a stationary or mobile showcase. Accordingly, it is a principal product of the present invention to provide an equipment bay on wheels, which contains the equipment and systems to facilitate CCTV production.

Another feature of the Cybershowcase is the fact it is readily transportable, easily adjustable in many different positions and adaptable to a wide variety of conditions to photography products.

The present invention further encompasses means and methods of simulating the shopper actually being in the showroom with a salesperson known as a CyberSalesPerson showing the product. The CyberSalesPerson is equipped with the means to effectively communicate (audio and video) online real-time with the shopper (retail customer) or buyer (wholesale customer) being serviced. These systems interface with the VPRI module assembly.

The volume purchasing and excess inventory and capacity purchasing information is conveyed from the VPRI module assembly to the Area/Local VPRIS Computer whereupon online purchasing is effected. Area/Local Business Owners can also advertise other goods or products for Excess Inventory Purchasing and advertise their services here for Excess Capacity Purchasing instead of with costly TV, Yellow Pages etc. The Certified Purchasing Planner, uses a system computer to monitor and advise purchasers on the best means to increase rebates by using the CPP system computer to communicate with the Local Area Computer/Server and the Regional Computer/Server and database software in which the purchasing transactional information is stored. The databases contain as much as possible the complete universal barcode database and the goods, products and services merchants advertise for volume purchasing and for purchasing of excess inventory and capacity. The CPP uses the CPP systems computer to constantly monitor and query computer/servers for advertisements from the databases which originate in the VPRI module assembly or onsite computer of affiliate online merchants, producers and wholesalers where purchases are made for appliances, clothing, groceries and many other types of consumer and small business goods and services and manufacturers where non-local wholesale purchases. This also includes security, fire and carbon monoxide monitoring services, telecommunications, natural gas, electricity, fuel oil, and other HVAC products and services transactions which are aggregated so that the CPP System Computer can and does access and utilize the database purchasing transactional information to calculate purchasing trends and desires



and the rebate amount that is to be rebated to the purchaser's retirement account for said transaction. Said information is used to consult with purchaser's and advise them on the preferred means of purchasing. The Regional VPRIS Computer networks with the Financial Institution Computer which is located in the VPRI System Credit Union (or other financial institution) that administers purchasers credit/debit accounts and facilitates the purchasing funds being debited from the purchasers account at the VPRI System Credit Union with said debited payment going to the sellers account for payment of the purchased goods, products and services, and for rebated funds (which represent the difference between the normal retail price and the volume discount price) are debited from the purchasers account which go to the purchasers investment account. The Certified Purchasing Planner, further uses a system computer to analyze merchant advertisements and selling trends to analyze purchasers on upcoming volume purchasing and excess inventory and capacity purchasing opportunities and also analyze and monitor purchasers accounts in the financial institution computer and consult with financial managers to advise the purchaser of their accounts and the best means to increase rebates etc.

## BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 Illustrates the modular structure of the Real-time interactive online product and services ordering and re-ordering system.

FIG. 2 Illustrates the Real-time interactive online Volume Purchasing Rebate Investing Module Assembly.

FIG. 3 Illustrates Online Buyer's and Seller's (CyberSalesPerson) Sub-Systems.

FIG. 4 Illustrates the Real-time interactive online product and services re-ordering modules.

FIG. 5 Illustrates a systems diagram showing the Real-time interactive online product and services ordering re-ordering modules and VPRI module assembly, which are located in Homes.

FIG. 6 Illustrates a systems diagram showing the Merchant Real-time interactive online product and services ordering re-ordering modules and VPRI module assembly, which are located in Commercial Buildings.

FIG. 7 Illustrates a systems diagram showing a home and commercial building with the Real-time interactive online product and services ordering and re-ordering System, VPRI module assembly payment card and terminal.

FIG. 8 Illustrates our Real-time interactive online, over-the- counter purchasing systems network diagram.

FIG. 9 Illustrates the WorldWholesaler Concept for Merchant Buyers.

FIG. 10 Illustrates the WorldMall Concept for Individual Shoppers.

FIG. 11 Illustrates a Top View of the CyberShowRoom Concept.

FIG. 12 Illustrates an End View of the CyberShowRoom Concept.

FIG. 13 Illustrates the Remote Operated Online Product Demonstration System (CyberShowCase) Concept Comprising.

FIG. 14. Illustrates Normal Distribution and Mark-Up.

FIG. 15 Illustrates Individual Internet Purchasing and Distribution Cycle.

FIG. 16 Illustrates Commercial Purchaser Internet Purchasing and Distribution Cycle

FIG. 17 Illustrates How Mark-Up is Eliminated and Rebates Added.

FIG. 18 Illustrates Over-The-Counter Purchasing and Rebates

## DESCRIPTION OF THE PREFERRED EMBODIMENT

For the purposes of promoting an understanding of the principles of the invention, references will now be made to the embodiment illustrated in the drawings and specific language will be used to describe the same. It will nevertheless be understood that no limitation of the scope of the invention is thereby intended. Any alteration and further modification in the described embodiment, and any further applications of the principles of the invention as described herein are contemplated as would normally occur to one skilled in the art to which the invention relates.

FIG. 1 Illustrates the modular structure of the Real-time interactive online product and services ordering and re-ordering system in accordance with the present invention. The diagram shows a remote re-ordering module 1, a product opening/unsealing station with a ordering module 2, with a barcode type reader 2A, and a RF type reader 2B, a monitor 3(touch screen or regular) and a VPRI module assembly 4 (U.S. Pat. No. 6,199,044 and U.S. Pat. No. 5,963,134 are hereby incorporated by reference in their entirety to provide additional background information)

FIG. 2 Illustrates the Real-time interactive online Volume Purchasing Rebate Investing Module Assembly; The VPRI module assembly 4 consist of the main computer/server with recording systems module 102 the monitoring, metering etc., microprocessor and universal barcode ROM microprocessor systems module 104, the control/relay module 105, the microprocessor bus 106, the computer/server bus 110, the control/relay bus 107, the power bus 108, and the aux.

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battery 101. (Provisional Patent Application No. 60/065233 and Application No. 09/190,152 and U.S. Pat. No. 6,282,714 are hereby incorporated by reference in their entirety to provide additional background information)

FIG. 3 Illustrates Online Buyer's and Seller's (CyberSalesPerson) Sub-Systems; The Buyers Sub-System includes a product opening/unsealing station with a ordering module 2, with a barcode type reader 2A, and a RF type reader 2B, a camera system 6 with microphone 6C and video display monitor 3 interfaced with the VPRI module assembly 4 that communicates 5 & 6A by wireless, online or otherwise with the Seller Sub-System (which includes various cameras such as; a finger bracket camera 8 – 8E, eyeglass, cap, beeper etc. covert cameras 9A and various other camera systems which are mounted on tripods 10, or any other type stand or mount) the CyberShowCase and the CyberShowRoom systems. The CyberSalesPerson is also equipped with a R/T capable Headset 7, that has a microphone 7A, earphones 7B and mini-radio unit w/ antenna 7C.

FIG. 4 Illustrates the Real-time interactive online product and services re-ordering modules; These Modules1, interface with a VPRI module assembly4 by way of direct wire 4A, Infrared frequency signal 4B, RF Signal 4C and Laser Signal 4D to the VPRI module assembly communication bus 4K, whereby signals are processed in the communications module 4G.

FIG. 5 Illustrates a systems diagram showing the Real-time interactive online product and services ordering re-ordering modules and VPRI module assembly, which are located in Homes; The diagram shows a layout of the system modules with a signal 11A from the VPRI module assembly 4 being transmitted to the Area/Local VPRIS Computer 301 where wholesale purchases are made for appliances, clothing, groceries and many other types of consumer and commercial goods and services. Area/Local Business Owners can also advertise other goods or products for Excess Inventory Purchasing and advertise their services here for Excess Capacity Purchasing instead of with costly TV, Yellow Pages etc. The Regional VPRIS Computer 303 facilitates non-local wholesale purchases. To include security, fire and carbon monoxide monitoring monitoring services, telecommunications, natural gas, electricity, fuel oil, and other HVAC products and services. Purchase funds are debited from the purchasers account at the VPRI System Credit Union 304 with payment going to the seller's bank 305, and rebates going to the purchasers investment company 306. The Certified Purchasing Planner 17 uses a system computer 17A to monitor and advise the purchaser of the best means to increase rebates etc. The method for consumers to purchasing goods, products and services and obtain and invest rebates using a plurality of purchasers 19 who have an option of volume purchasing and obtaining rebates 19A and/or purchasing excess inventory and obtaining rebates 19B. This option derives from many factors to include, consultation with the Certified Purchasing Planner (CPP) 17, or as a result of a decision based upon researching volume purchasing and excess inventory and capacity

purchasing opportunities and options with the ordering and control monitoring unit 3 and the purchasing facilitation systems unit (VPRI module assembly) 4. Volume purchasing and excess inventory and capacity purchasing opportunities and options can also downloaded to the purchaser based upon the purchasers past purchasing trends and desires. The reordering reader 1 or the opening station 2&2A can be used for reordering of goods, products and services

Purchasers will use various purchasing cards to include VPRI credit cards 1B, VPRI debit cards 1A, VPRI smart cards 1C or any other type card suitable for present invention purchasing. (U.S. Pat. No. 6,108,786 is hereby incorporated by reference in their entirety to provide additional background information)

Input devices such as card reader 1, and terminal 9, interfacing with the VPRI module assembly 4, which can allow said VPRI credit cards 1B, VPRI debit cards 1A, VPRI smart cards 1C or any other type card pay for the selected goods, products or service and facilitate rebates for the purchasers investment account. The volume purchasing and excess inventory and capacity purchasing information is conveyed from the VPRI module assembly 4 to the Area/Local VPRIS Computer 301 whereupon online purchasing is effected. Area/Local Business Owners can also advertise other goods or products for Excess Inventory Purchasing and advertise their services here for Excess Capacity Purchasing instead of with costly TV, Yellow Pages etc. The Certified Purchasing Planner 17, uses a system computer 17A to monitor and advise purchasers on the best means to increase rebates by using the CPP system computer 17A to communicate with the Local Area Computer/Server 301 and the Regional Computer/Server 303 and database software 301A and 303A in which the purchasing

transactional information is stored. The databases contain as much as possible the complete universal barcode database and the goods, products and services merchants advertise for volume purchasing and for purchasing of excess inventory and capacity. The CPP 17 uses the CPP systems computer 17A to constantly monitor and query computer/servers 301 and 303 for advertisements from the databases which originate in the VPRI module assembly 4 or Onsite computer 3A of affiliate online merchants 301A – 301 F producers 303A – 303B and wholesalers 303C where purchases are made for appliances, clothing, groceries and many other types of consumer and small business goods and services and manufacturers 303H where non-local wholesale purchases. To include security, fire and carbon monoxide monitoring monitoring services, telecommunications, natural gas, electricity, fuel oil, and other HVAC products and services transactions are aggregated so that the CPP System Computer 17A can and does access and utilize the database purchasing transactional information to calculate purchasing trends and desires and the rebate amount that is to be rebated to the purchaser's retirement account for said transaction. Said information is used to consult with purchaser's 17B and advise them on the preferred means of purchasing. The Regional VPRIS Computer 303 networks with the Financial Institution Computer 304 which is located in the VPRI System Credit Union 304A (or other financial institution) that administers purchasers credit/debit accounts 304B and facilitates the purchasing funds being debited from the purchasers account at the VPRI System Credit Union 304 with said debited payment going to the sellers account 305A for payment of



the purchased goods, products and services, and for rebated funds (which represent the difference between the normal retail price and the volume discount price) are debited from the purchasers account which go to the purchasers investment account 306A. The Certified Purchasing Planner 17, further uses a system computer 17A to analyze merchant advertisements and selling trends to analyze purchasers 19 on upcoming volume purchasing and excess inventory and capacity purchasing opportunities and also analyze and monitor purchasers accounts in the financial institution computer 304 and consult with financial managers to advise the purchaser of their accounts and the best means to increase rebates etc.

FIG. 6 Illustrates a systems diagram showing the Merchant Real-time interactive online product and services ordering re-ordering modules and VPRI module assembly, which are located in Commercial Buildings; The diagram shows a layout of the system with a card reader 1, and terminal 9, interfacing with the VPRI module assembly 4, which can allow the use of VPRI credit cards 1B, VPRI debit cards 1A, VPRI smart cards 1C or any other type card. The signal from the VPRI module assembly 4 being transmitted to the Area/Local VPRIS Computer 301 where wholesale purchases are made for appliances, clothing, groceries and many other types of consumer and commercial goods and services. Area/Local Business Owners 18 can also advertise other goods or products for Excess Inventory Purchasing and advertise their services here for Excess Capacity Purchasing instead of with costly TV, Yellow Pages etc. The Regional VPRIS Computer 303 facilitates non-local wholesale purchases. To

include security, fire and carbon monoxide monitoring monitoring services, telecommunications, natural gas, electricity, fuel oil, and other HVAC products and services. Purchase funds are debited from the purchasers account at the VPRI System Credit Union 304 with payment going to the seller's bank 305, and rebates going to the purchasers investment company 306. The Certified Purchasing Planner 17 uses a system computer 17A to monitor and advise the purchaser of the best means to increase rebates etc. The method for consumers to purchasing goods, products and services and obtain and invest rebates while Real-time interactive online, purchasing comprising using a plurality of purchasers 19 who have an option of volume purchasing and obtaining rebates 19A and/or purchasing excess inventory and obtaining rebates 19B. This option derives from many factors to include, consultation with the Certified Purchasing Planner (CPP) 17, or as a result of a decision based upon researching volume purchasing and excess inventory and capacity purchasing opportunities and options with the ordering and control monitoring unit 3 and the purchasing facilitation systems unit (VPRI module assembly) 4. Volume purchasing and excess inventory and capacity purchasing opportunities and options can also downloaded to the purchaser based upon the purchasers past purchasing trends and desires. The reordering reader 1 or the opening station 2&2A can be used for reordering of goods, products and services Purchasers will use various purchasing cards to include VPRI credit cards 1B, VPRI debit cards 1A, VPRI smart cards 1C or any other type card suitable for present invention purchasing. Input devices such as card reader 1, and terminal 9, interfacing with the VPRI

module assembly 4, which can allow said VPRI credit cards 1B, VPRI debit cards 1A, VPRI smart cards 1C or any other type card pay for the selected goods, products or service and facilitate rebates for the purchasers investment account. The volume purchasing and excess inventory and capacity purchasing information is conveyed from the VPRI module assembly 4 to the Area/Local VPRIS Computer 301 whereupon online purchasing is effected. Area/Local Business Owners can also advertise other goods or products for Excess Inventory Purchasing and advertise their services here for Excess Capacity Purchasing instead of with costly TV, Yellow Pages etc.

The Certified Purchasing Planner 17, uses a system computer 17A to monitor and advise purchasers on the best means to increase rebates by using the CPP system computer 17A to communicate with the Local Area Computer/Server 301 and the Regional Computer/Server 303 and database software 301A and 303A in which the purchasing transactional information is stored. The databases contain as much as possible the complete universal barcode database and the goods, products and services merchants advertise for volume purchasing and for purchasing of excess inventory and capacity. The CPP 17 uses the CPP systems computer 17A to constantly monitor and query computer/servers 301 and 303 for advertisements from the databases which originate in the VPRI module assembly 4 or Onsite computer 3A of affiliate online merchants 301A – 301 F producers 303A – 303B and wholesalers 303C where purchases are made for appliances, clothing, groceries and many other types of consumer and small business goods and services and manufacturers 303H where non-local wholesale purchases. To include security, fire

and carbon monoxide monitoring monitoring services,  
telecommunications, natural gas, electricity, fuel oil, and other HVAC  
products and services transactions are aggregated so that the CPP  
System Computer 17A can and does access and utilize the database  
purchasing transactional information to calculate purchasing trends  
and desires and the rebate amount that is to be rebated to the  
purchaser's retirement account for said transaction. Said  
information is used to consult with purchaser's 17B and advise them  
on the preferred means of purchasing. The Regional VPRIS Computer  
303 networks with the Financial Institution Computer 304 which is  
located in the VPRI System Credit Union 304A (or other financial  
institution) that administers purchasers credit/debit accounts 304B  
and facilitates the purchasing funds being debited from the  
purchasers account at the VPRI System Credit Union 304 with said  
debited payment going to the sellers account 305A for payment of  
the purchased goods, products and services, and for rebated funds  
(which represent the difference between the normal retail price and  
the volume discount price) are debited from the purchasers account  
which go to the merchants employee pension fund account 306A  
whereupon, funds are divided and further credited to employee 401k  
or pension accounts 306B . The Certified Purchasing Planner 17,  
further uses a system computer 17A to analyze merchant  
advertisements and selling trends to advise purchasers 19 on  
upcoming volume purchasing and excess inventory and capacity  
purchasing opportunities and also analyze and monitor purchasers  
accounts in the financial institution computer 304 and consult with  
financial managers to advise purchasers of their accounts and

employees on their accounts 306B and the best means to increase rebates etc.

FIG. 7 Illustrates a systems diagram showing a home and commercial building with the Real-time interactive online product and services ordering and re-ordering System and VPRI module assembly 4; The diagram shows a layout of the system modules located in Homes 11 and Commercial Buildings 18 wherein Purchasers will use various purchasing cards to include VPRI credit cards 1B, VPRI debit cards 1A, VPRI smart cards 1C or any other type card suitable for present invention purchasing. Input devices such as card reader 1, and terminal 9, interfacing with the VPRI module assembly 4, which can allow said VPRI credit cards 1B, VPRI debit cards 1A, VPRI smart cards 1C or any other type card pay for the selected goods, products or service and facilitate rebates for the purchasers investment account. It also shows a signal from the VPRI module assembly 4 being transmitted to the Area/Local VPRIS Computer 301 where orders from all over the area are combined and volume purchases are made from local vendors for appliances and gifts 301A, clothing 301B, groceries 301F, autos 301 C, sports and entertainment 301D and many other types of consumer and commercial goods and services 301E. Area/Local Business Owners can also advertise other goods or products for Excess Inventory Purchasing and advertise their services here for Excess Capacity Purchasing instead of with costly TV, Yellow Pages etc. The Regional VPRIS Computer 303 facilitates non-local volume purchases. To include security, fire and carbon monoxide monitoring services 303E, telecommunications

303G, natural gas and fuel oil 303B, electricity 303A, airline tickets etc. 303D and other products 303C and 303F and services.

FIG. 8 Illustrates our Real-time interactive online, over-the- counter purchasing systems network diagram; The diagram shows the product and services ordering and re-ordering System and VPRI module assembly, which are located in the home 11 or in a variety of establishments that represent the various type businesses (food 20A, housing 20B, apparel 20C, transportation 20D, health care and insurance 20E, entertainment and recreation 20F) the government uses for economic indicators. The diagram shows all types of persons that make [Over-The-Counter Purchase] Over-The-Counter Volume Purchases 19, who are our customers and who make over the counter purchases form merchants who have our VPRI module assembly 4. The diagram further shows the interface between the VPRI module assembly 4 and network local/area mainframes 301 and regional super computers 303. The mainframe 301 and super computer 303 contain as much as possible the complete universal barcode database and they constantly monitor and query each other as well as the databases of affiliate wholesaler's 303C and manufacturers 303H. The method for purchasing goods, products and services and obtain and invest rebates while Real-time interactive over-the- counter purchasing comprising using a plurality of purchasers 19 who have an option of volume purchasing and obtaining rebates 19A and/or purchasing excess inventory and obtaining rebates 19B. This option derives from many factors to include, consultation with the Certified Purchasing Planner (CPP) 17, or as a result of a decision based upon

researching volume purchasing and excess inventory and capacity purchasing opportunities and options with the ordering and control monitoring unit 3 and the purchasing facilitation systems unit (VPRI module assembly) 4. Volume purchasing and excess inventory and capacity purchasing opportunities and options can also downloaded to the purchaser based upon the purchasers past purchasing trends and desires. Purchasers will use various purchasing cards to include VPRI credit cards 1B, VPRI debit cards 1A, VPRI smart cards 1C or any other type card suitable for present invention purchasing. Input devices such as card reader 1, and terminal 9, interfacing with the VPRI module assembly 4, which can allow said VPRI credit cards 1B, VPRI debit cards 1A, VPRI smart cards 1C or any other type card pay for the selected goods, products or service and facilitate rebates for the purchasers investment account. The volume purchasing and excess inventory and capacity purchasing information is conveyed from the VPRI module assembly 4 to the Area/Local VPRIS Computer 301 whereupon online purchasing is effected. Area/Local Business Owners can also advertise other goods or products for Excess Inventory Purchasing and advertise their services here for Excess Capacity Purchasing instead of with costly TV, Yellow Pages etc. The Certified Purchasing Planner 17, uses a system computer 17A to monitor and advise purchasers on the best means to increase rebates by using the CPP system computer 17A to communicate with the Local Area Computer/Server 301 and the Regional Computer/Server 303 and database software 301A and 303A in which the purchasing transactional information is stored. The databases contain as much as possible the complete universal barcode database and the goods.

products and services merchants advertise for volume purchasing and for purchasing of excess inventory and capacity. The CPP 17 uses the CPP systems computer 17A to constantly monitor and query computer/servers 301 and 303 for advertisements from the databases which originate in the VPRI module assembly 4 or Onsite computer 3A of affiliate online merchants 301A – 301 F producers 303A – 303B and wholesalers 303C where purchases are made for appliances, clothing, groceries and many other types of consumer and small business goods and services and manufacturers 303H where non-local wholesale purchases. To include security, fire and carbon monoxide monitoring monitoring services, telecommunications, natural gas, electricity, fuel oil, and other HVAC products and services transactions are aggregated so that the CPP System Computer 17A can and does access and utilize the database purchasing transactional information to calculate purchasing trends and desires and the rebate amount that is to be rebated to the purchaser's retirement account for said transaction. Said information is used to consult with purchasers' 17B and advise them on the preferred means of purchasing. The Regional VPRIS Computer 303 networks with the Financial Institution Computer 304 which is located in the VPRI System Credit Union 304A (or other financial institution) that administers purchasers credit/debit accounts 304B and facilitates the purchasing funds being debited from the purchasers account at the VPRI System Credit Union 304 with said debited payment going to the sellers account 305A for payment of the purchased goods, products and services, and for rebated funds (which represent the difference between the normal retail price and



the volume discount price) are debited from the purchasers account which go to the purchasers investment account 306A. The Certified Purchasing Planner 17, further uses a system computer 17A to analyze merchant advertisements and selling trends to advise purchasers 19 on upcoming volume purchasing and excess inventory and capacity purchasing opportunities and also analyze and monitor purchasers accounts in the financial institution computer 304 and consult with financial managers to advise purchasers of their accounts and the best means to increase rebates etc.

FIG. 9. Illustrates the WorldWholesaler Concept for Merchant Buyers; The diagram shows countries around the world 26 and the product and services ordering and re-ordering System and VPRIS, which are located in a variety of establishments that represent wholesaler venues 23, factories 24, small retail establishments 25, To accomplish this strategy, the company will acquire or affiliate with all types of stores, shops, 18, 20A, 20B, 20C, 20D, 20E, 20F, and other establishments from around the world. The company will use these stores, shops, 18, 20A, 20B, 20C, 20D, 20E, 20F, and establishments as Cyber showrooms etc., and ship goods to customers from more centralized warehouses etc.

FIG. 10 Illustrates the WorldMall Concept for Individual Shoppers; The diagram shows countries around the world and the product and services ordering and re-ordering System and VPRIS, which are located in a variety of establishments that represent small retail establishments 25, and home office establishments 27. To

accomplish this strategy, the company will acquire or affiliate with all types of stores, shops, 18, 20A, 20B, 20C, 20D, 20E, 20F, and other of establishments from around the world. The company will use these stores, shops, 18, 20A, 20B, 20C, 20D, 20E, 20F, and establishments as CybershowRooms etc., and ship goods to customers from more centralized warehouses etc.

FIG. 11 Illustrates a Top View of the CyberShowRoom Concept; It shows the interior of a shop, showroom, or tradeshow booth 28 in which there is installed a CCTV purchasing system in accordance with the present invention. The CCTV purchasing system includes pan, tilt, and zoom cameras that are mounted on a track 28C , or in domes 28B or on a variety of stands 28F. The pan, tilt, zoom cameras are movably supported on an elongated tracks or rails or in domes which are suspended from the ceiling or from the walls of the CyberShowRoom. Signals from the cameras are processed, digitally recorded in the VPRI module assembly 4 and transmitted as the situation dictates. These cameras allow real-time interactive online viewing of the shop, showroom, or tradeshow booth floor or see inside glass counters 28D and showcases 28E from anywhere in the world. The systems brings movement and interactive functionality to a web site allow users to see and interact with each other and to virtually visit and browse through venues worldwide. . In essence, our video systems become proxy eyes and our audio systems become the proxy ears and voices of our clients. Thus, if two of more people are a long distance apart and have a need for face to face discussion, or a need to view information or objects while conducting the face to

face discussion, using our technology will save them a great deal of time and money. Our systems will be easy to use and relatively low in cost.

FIG. 12 Illustrates an End View of the CyberShowRoom Concept; It shows the interior of a shop, showroom, or tradeshow booth 28A in which there is installed a CCTV purchasing system in accordance with the present invention. The CCTV purchasing system includes pan, tilt, and zoom cameras that are mounted on a track 28C, or in domes 28B. The pan 28G, tilt 28H, zoom 28I, cameras are movably supported on an elongated tracks or rails or in domes which are suspended from the ceiling or from the walls of the CyberShowRoom. Signals from the cameras and from wireless receiving and transmitting devices such as Buyers and Sellers Sub-Systems are received by the wireless antenna 28J and transmitted from the wireless transmitter antenna 28K whereupon the signals are conveyed to, processed, and digitally recorded in the VPRI module assembly 4 and transmitted as the situation dictates. These cameras and other showcase cameras 28M, allow real-time interactive online viewing of the shop, showroom, or tradeshow booth floor or see inside glass counters 28D and showcases 28E from anywhere in the world. The venue entry and exit detection beam 29K automatically notify shop personnel when an Over-The-Counter shopper 19 enters or leaves the site and makes adjustments to the VPRI module assembly 4 as appropriate. The systems brings movement and interactive functionality to a web site allow users to see and interact with each other and to virtually visit and browse through venues

worldwide. . In essence, our video systems become proxy eyes and our audio systems become the proxy ears and voices of our clients. Thus, if two or more people are a long distance apart and have a need for face to face discussion, or a need to view information or objects while conducting the face to face discussion, using our technology will save them a great deal of time and money. Our systems will be easy to use and relatively low in cost.

FIG. 13 Illustrates the Remote Operated Online Product Demonstration System (CyberShowCase) Concept Comprising: A merchandise display apparatus that allows real-time interactive online viewing of objects or information. The apparatus includes means for a shopper to use his/her VPRIS and call up the unit, view the merchandise and if desired, get a much better full view of the displayed merchandise by controlling the motorized revolving hanger rack 29B, the motorized revolving platform 29H, cameras 29D, and other components of the unit. During normal operations, the cameras 29D view the merchandise from a position forwardly of the motorized revolving hanger rack 29B and the motorized revolving platform 29H which is above the equipment bay 29I of the unit. Displayed merchandise is illuminated by one or more track mounted floodlights 29C and adjustable light rails 29F. To the CCTV camera 29D, the displayed merchandise stands out in space, the motorized revolving platform 29H and motorized revolving hanger rack 29B being concealed by the direction from which the product is viewed. When it is desired to position the camera above the product the lower edge of the backdrop may be curved forwardly

all along the motorized revolving platform 29H thereby concealing the motorized revolving platform from the picture taken. A principal feature of the present invention is the means for changing the scene comprising a multi-colored backlight system 29M, a rear screen projection system 29N, and a white backdrop system 29O. The unit's communication system is contained in the VPRIS equipment bay 29I allows full-duplex communications with signals being conveyed through the system antenna 29A or by some other means. The unit also allows wide adjustability of components, the pan, tilt, and zoom cameras 29D are adjustable in elevation by moving the cameras mounting slide along the adjustable camera racks w/conduit 29G.

FIG. 14 Illustrates Normal Distribution and Mark-Up, it shows the normal goods, products or services distribution chain and shows how the cost of said goods, products or services increase as they move through the distribution chain from manufacturer \_\_\_\_\_ to Regional Distribution \_\_\_\_\_ who add mark-up on to the retailer \_\_\_\_\_ who add additional mark-up prior to sale to the consumer/merchant purchaser who pays a considerable amount more than for the item than if purchased directly from manufacturer.

FIG. 15 Illustrates Individual Internet Purchasing and Distribution Cycle of the present invention. It shows the purchaser 11 in a transaction with manufacturers \_\_\_ or regional distributor \_\_\_ and direct purchasing using the proprietary technology of the present invention, which is in effect group purchasing yet purchasing as an

individual and obtaining volume purchasing prices and benefits while doing so. These transactions will provide high quality goods, products or services that are conveniently organized into departments by brand and category such as food products and services, housing products and services, apparel products and services, transportation products and services, health care products and services, insurance products and services, entertainment and recreation products and services. While the illustration is not actually showing all of the novel items and means brought forth in this invention on this illustration, it is hereby noted that these items are used separately or together for the real-time interactive purchasing transactions to include volume purchasing, or excess inventory purchasing or excess capacity purchasing of goods, products or services.

FIG. 16 Illustrates Commercial Purchaser Internet Purchasing and Distribution Cycle of the present invention. It shows the commercial purchaser 18 in a transaction with manufacturers or regional distributor and direct purchasing using the proprietary technology of the present invention, which is in effect group purchasing yet purchasing as an individual and obtaining volume purchasing prices and benefits while doing so. These transactions will provide high quality goods, products or services that are conveniently organized into departments by brand and category such as food products and services, housing products and services, apparel products and services, transportation products and services, health care products and services, insurance products and services,

entertainment and recreation products and services. While the illustration is not actually showing all of the novel items and means brought forth in this invention on this illustration, it is hereby noted that these items are used separately or together for the real-time interactive purchasing transactions to include volume purchasing, or excess inventory purchasing or excess capacity purchasing of goods, products or services.

FIG. 17 Illustrates How Mark-Up is Eliminated and Rebates Added -and shows the cumulative affect of using the online real-time interactive ordering and re-ordering Volume Purchasing Rebate Investing technology of the present invention for purchasing transactions. It further shows the eliminations of most mark-up and obtaining rebates, which would normally be this mark-up, and the placing of said rebates into the purchasers investment account.

FIG. 18 Illustrates Over-The-Counter Purchasing and Rebates and shows the cumulative affect of using the real-time interactive over - the - counter Volume Purchasing Rebate Investing technology of the present invention for purchasing transactions. It further shows an purchaser making over-the-counter Volume Purchasing transactions of all types goods, products or services and obtaining rebates which are placed into the purchasers investment account.

## Purchasing

The Invention encompasses technology that will greatly facilitate the sale of goods and services while providing customers with a means to painlessly fund their Individual Retirement Accounts. The present invention will facilitate the offering of tens of thousands of products from several hundred manufacturers through online stores on the Internet, through [Over-The-Counter Purchase] Over-The-Counter Volume Purchase with local merchants and contractors and through Real-time Interactive purchases with merchants and wholesalers around the world. The Invention provides an online shopping experience that incorporates traditional shopping mall and mail order features into an interactive, easy-to-use and compelling online environment. Online technology, and the Internet in particular, is an advantageous medium for the selling of merchandise relative to traditional retail stores and mail-order catalogs. Leveraging online technology and the global reach of the Internet, the online retailing and wholesaling model of the present invention provides virtually unlimited online shelf space and the ability to reach a geographically unlimited customer base, without the costs associated with constructing traditional retail stores and distributing mail-order catalogs. The Invention's strategy is to offer quality merchandise, provide effective customer service, and capitalize on the inherent economies of the online retailing model by allowing the purchaser to purchase excess inventory and excess capacity from merchants and vendors of all types.



The Invention provides for transacting with merchant in online stores over the Internet or by over-the-counter stores in malls or other venues. The Invention's online stores will provide high quality color video camera images and detailed information relating to products or services that are conveniently organized into departments by brand and category such as food products and services, housing products and services, apparel products and services, transportation products and services, health care products and services, insurance products and services, entertainment and recreation products and services.

Shoppers can search for, browse and select products throughout the stores and place selected merchandise in virtual shopping carts that facilitates the process of collecting items, subtotaling purchases and reaching the purchase decision. Furthermore, The Invention will establish strategic relationships with manufacturers, which allow most products to be rapidly shipped directly from the manufacturer. Manufacturer direct shipping enables the Company by way of the Certified Purchasing Planner to assist merchants in avoiding inventory-related risks; limit overhead costs and provides prompt delivery. As part of its marketing strategy, the Company using the Certified Purchasing Planner will form strategic alliance with local merchants and contractors pursuant to a marketing agreement. In addition, the Certified Purchasing Planner plans to establish strategic alliances with other online companies and begin a targeted advertising campaign to attract additional customers to the its online stores. It

is believed that both online and traditional media exposure are critical to maximizing brand recognition and driving traffic to its online stores.

## PRODUCTS

The present invention's brick and mortar stores or store on the Internet will offer tens of thousands of products from several hundred manufacturers. Products or services range widely in price. Internet products or services will be featured with a high quality color picture and detailed information relating to product or service specifics, service care or purchasing instructions. The present invention's store on the Internet is designed to accommodate the needs of both the browser and the directed shopper. The browser can view an array of products or services by simply clicking on one of the feature departments or service categories. The directed shopper is able to quickly locate a specific product or service by category or brand by using the store's search function or store directory. By clicking on the picture of a product or service, the customer is presented with detailed information relating to product or service specifics, service, care or purchasing instructions.

The present invention seeks to provide a compelling shopping environment that will attract customers and encourage shoppers to purchase. The present invention intends to add sound and video features to its Internet store that will guide shoppers through the store and announce special offers. The present invention also aims

to make the shopping experience as simple and convenient as possible. The present invention features a virtual shopping bag function that allows the shopper to accumulate merchandise for purchase while browsing through the store. Items can be added to or subtracted from the shopping cart at any time. As a registered member, the customer is able to retain items in the shopping cart indefinitely, even after leaving the store or logging-off. After selecting an item to purchase, the customer is prompted to complete an order. In choosing a payment method when placing an order, customers have the option of securely submitting credit card information online or telephoning or faxing the information to customer service representatives. The present invention also provides the option of payment by check or money order. The present invention sends e-mail notifications that confirm the order and shipment and promote special offers and events.

Worldwide Shopping and Buying can be accomplished whereby the company will acquire or affiliate with all types of stores, shops, and other of establishments from around the world. The company will use these stores, shops, and establishments as CybershowRooms etc., and ship goods to customers from more centralized warehouses etc.

The Volume Purchasing Rebate Investing (VPRI) Modular Assembly is a powerful modular assembly comprising microprocessor and other devices that greatly increases the efficiency of the purchasing process and includes sub-circuits, relays

other devices, sub-systems and components that compress and decompress bandwidth and connects to POTS, and wide bandwidth wireless, DSL, Fiber Optic, Cable, Satellite or any other signal conveying means. The VPRIS then allows the transmission and reception of real-time digital, optical, analog or any other type of data, video and audio signals or information to better facilitate the buying and selling of goods and services and enhancing the safety and security of buyers and sellers.

The present invention will be continually upgraded to interface with emerging technologies and new developments in web technologies with the objective of optimizing customer interfaces, web site features and operational systems. Technologies including systems that will enrich the online shopping experience and deliver more effective marketing messages, to provide customized services to shoppers in stores on the Internet. The present invention also encompasses methods to improve bandwidth technology that makes Online purchasing a more real time video experience for both, buyer and seller.

High quality data sensors, of varying type, are used to detect product information such as bar codes and other data. The sensors sense the data by various means such as optical scan, proximity, wigant, and processed and pre-amplifies the signal in the data processing circuit, from there, the data is then carried to data transmission components and. over the wires or by other means to the central processing unit

located in the Volume Purchasing Rebate Investing System.

There the data is further transmitted by radio wave, by satellite communications, by cellular telephone, or by regular telephone lines or by other means of communications to the VPRIS Computer. There, it is received and processed by and appropriate volume purchasing is effected.

The Product Opening and Unsealing Station consists of opening means and data sensing means. As a can rotates as it is being opened, the data sensor automatically reads the bar-code data; this data is automatically conveyed to the processing unit where it is stored in memory to be compiled and accessed as needed. As this data is accumulated, it forms the basis for future re-ordering of products.

The Product and Services Ordering and Re-Ordering System interfaces with the VPRI module assembly, these devices combined, are the first devices developed from the ground up to aid owners and managers of small to medium sized residential and commercial buildings coordinate and better manage their purchasing of products and services to include various consumer goods and services to include security, fire and carbon monoxide monitorings, telecommunications, natural gas, electricity, water, HVAC, and other energy conservation, building safety and maintenance operations. The VPRI module assembly meters, monitors and controls all of the building systems relating to these operations and uses powerful

software to integrate all systems information into a single server database located at local, area or regional VPRIS Computers.

The deregulation of utilities has brought about a need to change and improving the means, methods for managing utilities and protecting the inhabitants of buildings in urban areas. The system allows inhabitants to save on utilities and security while enjoying the comfort and safety of their buildings. The system combines into one device a method and apparatus to remotely monitor, control and manage the environment of buildings and to detect fire, smoke and intrusion; to measure fuel oil, water, natural gas and electricity; to remotely control the operation of furnaces, boilers, heat pumps, air conditioners, lights, appliances and hot water heaters; to prevent foul odors and clogging of plumbing pipes and the flooding of these buildings due to the building of grease, gelatin and other waste in these plumbing pipes to clog. Are problems across the country.

The VPRI module assembly also includes systems to monitor purchasing peaks and valleys during the year to facilitate the purchasing and selling of excess inventory and capacity.

RF Type Readers (insert incorp. by ref statement etc.

Intensive use of RF Type Readers and monitoring for ordering and re-ordering occur across the lifecycle of goods or products. The key is intensive scanning associated with gathering extensive product data upon using the item. The real-time use data on every

item would help manage the flow of use of items. The VPRI metering consumption database software automatically handles low-stock situations, and resolves status inquiries. Consumers will know the status of their supplies or other consumable on-hand items. Consumers might even know when and where they are using these items, so as to better manage their use.

In the store, retailers would know all about their inventory on the shelf at all times. Retailers could see how shoppers actually shop (which would help retailers create better store configurations). Retailers could "check-out" a customer's purchase without the labor of manually scanning (and without making customers wait in line or find a sales associate). Stale stock could discount itself automatically and mis-shelved items could cry out for re-shelving. Retailers could also reduce "shrinkage" (the polite term for theft) by more intensive awareness of inventory.

In the future home, it is envisioned that domestic appliances would aid in domestic logistics through product scanning. Using the VPRI re-ordering system located near refrigerators, pantries, and cabinets, closets, shelving and other storage places will allow the consumer to know when stocks are running low and when replenishing is needed..

### Purchasing Agent Sub-System:

Comprises said the company and the Certified Purchasing Planner (CPP) who are the purchasers' personal volume purchasing purchasing agent and assists purchasers in obtaining all volume purchasing benefits and in doing so, they use the sophisticated information services delivery and shopper tracking systems by integrating third-party systems. These information systems can be viewed as four integrated systems: (i) a publishing system, (ii) a selling system and (iii) CCTV System (iv) and order processing system, all of which are supported by Relational Databases and other software in the VPRI Module Assemblies and VPRI Hub Computers.

Publishing Data Module. The publishing system contains information about all items in the present invention's stores that have been offered for VPRI type purchasing, including retail price, cost, rebates, color and size characteristics, group information and all manufacturer related information. Once the manufacturers have offered their products to the present invention, the data sets are published (downloaded) to the present invention's purchasers, both online and over-the-counter.

Seller Data Module. The present invention's Purchasing Agent system functions with merchants of brick and mortar stores as well as merchants of stores on the Internet, and are designed to give customers a convenient and efficient means to effect their



volume purchases. It will use copyrighted software and proprietary Internet web servers to handle the volume purchasing transactional events, queries and updates to the SQL Server database. The Purchasing Agent system software is also designed to give customer service representatives, who are the Certified Purchasing Planners (CPP's) of the present invention, instant access to all merchant goods, products and services information, to automatically update all changes to merchants and inform the merchant of sales status by automated e-mail communications.

The CPP will also use the selling system to assist customers with their volume purchasing efforts by informing them of all opportunities in their respective areas. The CPP will also use the Purchasing Agent system to assist customers in increasing their rebates by also keeping them informed of opportunities in their areas. All transactions are secured by using the encryption means of the VPRI module assembly

Ordering Data Module. The present invention's Purchasing Agent ordering system retrieves ordering information from selling systems, validates VPRI credit cards, processes the orders, creates and issues purchase orders to merchants and manufacturers and handles all post-sale marketing efforts. The ordering system also allows for orders to be taken over the telephone. The ordering system software is also designed to give customer service representatives, who are the Certified Purchasing Planners (CPP's) of the present invention, instant access to all customer information, to automatically update all changes to a customer's order and

inform the customer of order status by automated e-mail communications.

The CPP will also use the ordering system to assist customers with their volume purchasing efforts by also keeping them informed of opportunities in their areas. The CPP will also use the ordering system to assist customers in increasing their rebates by also keeping them informed of opportunities in their areas. The CPP's and marketing departments can access customer profile information to search and analyze customer demographics and buying patterns in order to suggest new programs and offers to customers. The system will also communicate with the merchants or warehousing facilities in real time for updates on order shipments and stock status positions.

## The VPRI Hub Relational Database

The VPRI Hub Database “is a large collection of data in a computer, organized so that it can be expanded, updated, and retrieved rapidly for various uses” in the form of data modules for every type of application or use that is to be processed and/or combined at the hub, the VPRI Hub Database is a “Relational Database which allows data from other data modules to be displayed, edited, and used in the hub database modules without having it copied to the hub database modules, the data displayed in the hub database modules changes whenever the values in the other data modules change,”<sup>1</sup> comprising: organization module; membership module; broker module; merchant module; meter consumption module (goods and products); monitoring alarm module (services); control module; purchasing module; volume purchasing module; excess inventory purchasing module; excess capacity purchasing module; rebates module; savings account module; investing account module.

(U.S. Pat. No. 5,737,592 is hereby incorporated by reference in their entirety to provide additional background information)

## CyberShowRoom

This segment of the present invention interfaces with the VPRI module assembly and relates generally to closed-circuit television purchasing systems and pertains more particularly to such systems in which a television camera is mounted on a carriage for movement along a rail or track and in which the system is subject to automatic control by a computer or the like.

It is known to provide closed circuit television purchasing systems using either cameras in a fixed location or cameras that are mounted for movement along a track, dome or stand. It is also known, in the case of a system using a fixed-position camera, to provide automatic acquisition of a product object in response to an command signal or the like. Assuming that data has previously been stored in the control system to indicate the required direction of view and appropriate zoom and/or focus condition for the camera to provide an image of the product, the control system can implement an immediate adjustment to the camera direction, zoom condition, etc. so that an image of the product is provided by the camera within a very short time.

However, when the system utilizes a moving camera, such as a camera mounted on a carriage that travels along a rail, the camera may be located at any arbitrary position in its range of movement at the time a command is received. Since the camera location at the time of the command cannot be known in advance, it is not possible to store in advance data defining a particular

direction and zoom condition of the camera, which will enable the camera to provide an image of the product from the position of the camera at the time of the command.

The present invention also includes methods of simulating the motion of real-time shopping through the use of pan, tilt and zoom cameras, which enhance product presentation through motion etc. In the case of an operator-attended purchasing system, the human operator may attempt to respond to the command signal by operating system controls to reposition the camera carriage and to adjust the camera direction, etc. so that an image of the product is obtained. However, the variety of possible camera positions and directions-of-view may lead to disorientation on the part of the operator. Also, if the system is set up with multiple products for which commands may be actuated, the operator may have difficulty identifying the particular product to which the command pertains. As a result, the human operator's response to the command may be too slow, thus causing the operator to become frustrated.

While it might be proposed to define a predetermined position along the track to which the camera should be moved in response to an command which pertains to a particular product, and then an appropriate direction of view and zoom condition data could also be stored for providing an image of the product from that predetermined position, such an approach carries the disadvantage

that a significant amount of time may be required to move the carriage to the predetermined position from the position of the carriage at the time the command is received. Even if automatic camera direction and zoom adjustments are performed before or during carriage movement so that the camera will be in an appropriate orientation and zoom condition to provide the image of the product as soon as the predetermined carriage position is reached, still product acquisition cannot take place during the time the carriage is in motion, and product acquisition thus may be substantially delayed.

The present invention also includes means and methods whereby shoppers/buyers virtually shop at regional as well as international establishments without leaving the comfort of their homes and businesses. However, purchased products are pre-positioned at strategic locations to speed up delivery to the purchaser etc.

## CyberShowCase

This segment of the present invention interfaces with the VPRI module assembly and relates to a new and improved merchant's CyberShowCase which has for its principal purpose to provide a moving and adjustable CCTV system for motorized revolving platform and hanger systems on which the product to be pictured rests and also for a multi-colored backdrop system which is positioned behind the product in the line of sight of the camera. The multi-colored backdrop is preferably illuminated from behind with rear view projection or from the front with either a white light or a light having appropriate color filter. The projectioned or multi-colored backdrop provides a wide variety of scenes as background for the product being photographed.

The present invention encompasses means and methods of giving the presented product motion through the use of pan-tilt-zoom cameras and moving platforms and racks located in the CyberShowCase. Not only do these devices provide motion, but they also present multiple viewing angles to make product presentation more appealing.

The CyberShowCase may be used either as a stationary or mobile showcase. Accordingly, it is a principal product of the present invention to provide an equipment bay on wheels, which contains the equipment and systems to facilitate CCTV production.

Cont. Patent Application Number: 09/339,059 – Art Unit: 3625,

Another feature of the present invention is the fact it is readily transportable, easily adjustable in many different positions and adaptable to a wide variety of conditions to photography products.



## CyberSalesperson

The present invention encompasses means and methods of simulating the shopper actually being in the showroom with the CyberSalesPerson showing the product. The CyberSalesPerson is equipped with the means to effectively communicate (audio and video) online real-time with the shopper (retail customer) or buyer (wholesale customer) being serviced. These systems interface with the VPRI module assembly. (Information Being Researched and Developed and Will Be Included In The Patent Application)